



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/273,833	03/22/1999	RYOHEI KUKI	TI-28612	7627

23494 7590 10/17/2002

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

KUMAR, PANKAJ

ART UNIT PAPER NUMBER

2631

DATE MAILED: 10/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/273,833

Applicant(s)

KUKI ET AL.

Examiner

Pankaj Kumar

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-15 and 18-23 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 16, 17, 24 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed have been fully considered and they are persuasive regarding the claims with the tables.
2. Applicant's arguments filed in regards to other claims have been fully considered but they are not persuasive.
3. As per applicant's arguments requesting a teaching for a portion of claim 1, Yamakawa USPN 5844741 teaches in figure 1, adding a predetermined value (Yamakawa fig. 1: 25 will add a positive or negative value to perform data correction; it is a predetermined value since the addition was determined in a prior element – element 21) to the filtered output signal (Yamakawa fig. 1: filter 14 is prior to elements 25 and 21) when a predetermined error event pattern (Yamakawa fig. 1: “error signal”; predetermined since it is prior to data correction circuit) due to media noise (Yamakawa fig. 1: 11) occurs in recovered data output signal.
4. As per double patenting on claim 12, claim 12 discusses processing a signal that “ ... has been equalized ... ”. The processing in claim 12 occurs in the same manner as in claim 9 of application 09/229945 which performs processing after “equalizing”. Since in claim 12 of the current application (09/273833), processing is occurring on a signal that has already been equalized, an equalizer has been omitted from the claim. It has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. In re Karlson, 136 USPQ 184. The teaching of claim 12 can be found in the office's rejection of claim 9 in application 09/229945 which is rejected based on Reed USPN 5961658.

Art Unit: 2631

5. As per $ex=+(1)$ and $ex=+(1,-1)$, they are mentioned as errors in the specification; however, they are not explained as to allow one skilled in the art or the office to understand the following:

- a. the meaning of error $ex=+(1,-1)$
- b. the difference between errors $ex=+(1)$ and $ex=+(1,-1)$

Response to Amendment

1. Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-4, 5, 6, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 6, 7, 9, 12, 14, 16, 18, 22, 24, 25, 28, 29, respectively, of copending Application No. 09/229945. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons below.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Regarding claim 1, this application added the following in the preamble: correcting media noise errors. It is obvious for both applications to correct media noise errors.
5. Regarding claim 1, this application is substantially the same except for the following change to the body: the application added “adding a predetermined value to the filtered output signal when a predetermined error event pattern due to media noise occurs in said recovered data output signal;” and removed “generating an error event pattern indicating signal ...” Adding a value due to an error event causes a signal. Thus generating a signal due to an error is the same as adding a value due to an error.
6. Regarding claims 2-6 in this application, they are exactly the same as the copending application as respectively ordered above.
7. Regarding claim 12:
 - a. equalization was removed – it would be obvious to do the remaining steps without an equalizer
 - b. detecting from a transducer head was added – it is obvious in both applications to detect from a transducer head.
 - c. adding a value vs. generating a signal was discussed above.
8. Regarding claims 13-15 in this application, they are exactly the same as the copending application as respectively ordered above.
9. Claims 18-23 are similarly rejected for double patenting.

Art Unit: 2631

10. Claims 7-11, 16-17, 24-25 are objected to for being dependent on rejected claims cited for double patenting.

11. Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

13. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 4, 5, 14, 15, 19, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claims 4, 5, 14, 15, 19, 20 are rejected since these claims and the specification do not define how $ex=+(1)$ differs from $ex=+(1-1)$ nor is there an explanation of what these mean.

Allowable Subject Matter

16. Claims 10, 11, 16, 17, 24, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: tables in the claims.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2631

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Monday through Thursday after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (703) 305-4378. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

PK
October 15, 2002


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

10/16/02